

## Republic of Belarus

With a mid-level income and a population of 9 million, Belarus presents a mid-sized market that has many characteristics of modern western telecommunications markets. Although some restrictive legislation is in place, especially where the sale of services is concerned, Belarus seems a promising, yet non-democratic marketplace where mobile internet access is concerned. Mobile penetration has reached over 108% of the population.

### TELECOMMUNICATIONS MARKET

Indicator <sup>42</sup>	Measurement	Value
Computers	Per 100	26.0 (2007)
Internet Users	Per 100	32.1
Fixed Lines	Per 100	43.6
Internet Broadband	Per 100	17.55
Mobile Subscriptions	Per 100	108.9
Mobile Broadband	% internet users	17.4%
International Bandwidth	Per 100	4.76kb

There are 4 operators in Belarus - Velcom, offering voice/text/data and positioned as quality operator; MTS Belarus, offering voice/text/data and positioned as fair price operator; Life, offering voice/text/data, entered market later and is still behind other GSM operators in quality and coverage; Belcel (CDMA) is focused on data plans primarily, but also offers voice/text services and is positioned as a high-speed mobile internet provider rather than a traditional mobile operator. There was one additional potential operator called Yota, which planned to offer data only, using LTE standard. However, Yota recently announced that it intended instead to exit the Belarus market in order to focus on its Russian market. Yota.by was initially set up as a wimax carrier but never achieved the same market interest as in Russia.

ARPU (Average Revenue Per User) plummeted for all operators, because of devaluation of currency in 2011.

### QUICK FACTS – BELARUS

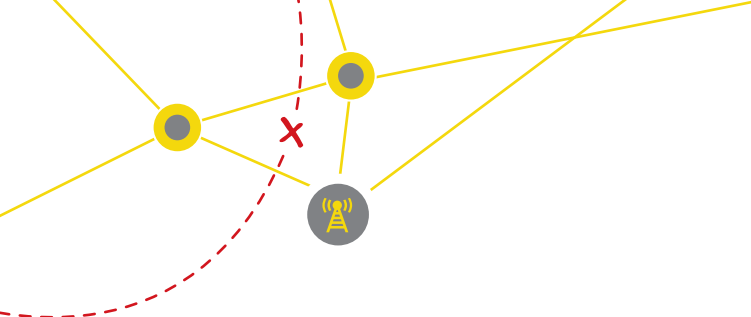
**Land Area:** 207,600 sq km\*  
**Population:** 9.5 million  
**GDI per capita, PPP** \$13,590 (WB, 2010)

**TLD:** .BY  
**Fixed Telephones:** 4.2 million (2011)  
**GSM Telephones:** 10.7 million (2011)  
**Fixed Broadband:** 1.7 million (2010)  
**Internet Hosts:** 68,118 (2010)  
**Internet Users:** 6.8 million (2010)



Velcom implemented IPv6 on 6th June 2012 for the international IPv6 day and announced that the official website [www.velcom.by](http://www.velcom.by) would be permanently reachable in IPv6-protocol. According to Christian Ladstaetter, Head of the Velcom IT Division, they are now preparing their network to provide IPv6 services to subscribers in the future.

40 [www.worldbank.org](http://www.worldbank.org)



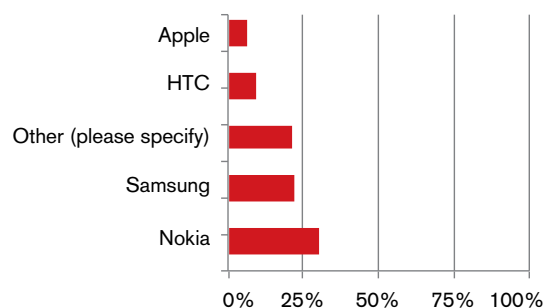
Pricing Analysis (\$US)	Belarus	All countries surveyed	
		Rank by Cheapest	Median Price
PRE-PAID Package Pricing			
Monthly Package Cost			
Cost per Minute National Call (first 3 min)	0.04	2	0.09
Price for Data Traffic (Price per MB)	0.12	10	0.05
Price for One Text Message	0.02	5	0.02
POST-PAID Package Pricing			
Monthly Package Cost		1	7.53
Cost per Minute National Call (first 3 min)			0.06
Price for Data Traffic (Price per MB)			0.04
Price for One Text Message			0.03

Operator Brands	Velcom	MTS	Life	Belcel
Survey Respondents	36%	42%	8%	28%
Subscribers	4,620,400	4,880,000	1,700,000	196,000
Mobile Internet Users	830,000	350,000	680,000	200,000
Ownership	Austria	Russia	Turkey/Sweden	Netherlands

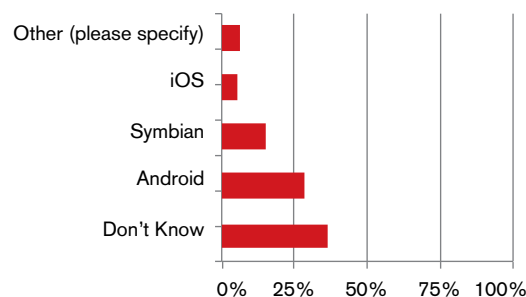
## INTERNET ACCESS

75% of respondents used mobile internet. Of these, 20% used WiFi to access the internet with 47% paying for a limited volume of data with their subscription, and a further 12% paying for usage. 16% indicated that they did not have access to the internet from their mobile handset.

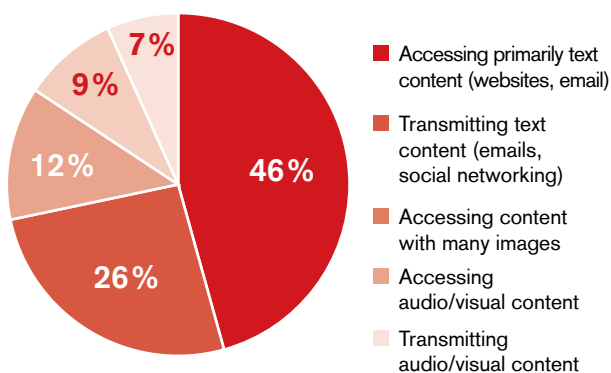
## TOP 5 HANDSET MANUFACTURERS



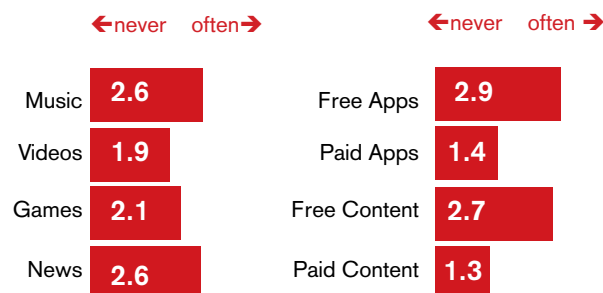
## TOP 5 MOBILE OPERATING SYSTEMS



## USE OF THE MOBILE INTERNET 2012



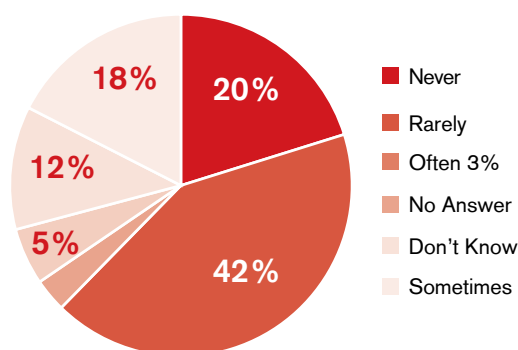
### TYPES OF MOBILE DOWNLOADS INCLUDING CONTENT (LEFT) AND TYPES OF APPS (RIGHT)



### CENSORSHIP AND CIRCUMVENTION

Legislation introduced and refined in the period of 2010-2011<sup>41</sup> (Law № 317-3 of the Code of Administrative Offences) obliges internet providers (and mobile operators) to block certain websites if services are provided to state-owned entities, or by choice of a subscriber. This legislation also requires internet cafés and WiFi hotspot owners to register all users' IDs.

### HOW OFTEN DO YOU ENCOUNTER BLOCKED WEBSITES? (IN-COUNTRY SURVEY)



Business entities engaged in the sale of goods and services that require the use of information networks (including systems and resources with an internet connection) and operating in the territory of Belarus must be registered in the manner prescribed by

legislation. Of its own volition, Operator Life blocked several opposition websites, but later remote these blocks. There is widespread belief that internet traffic, text messages, and voice calls of oppositional activists are routinely monitored.

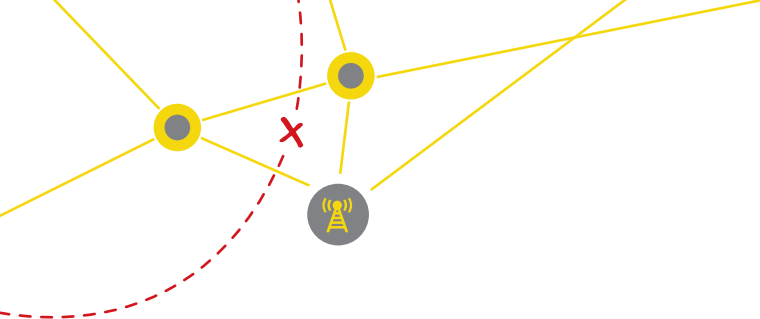
The OpenNet Initiative (ONI) report on Belarus<sup>42</sup> indicates that "Officially, internet filtering and monitoring of telecommunications networks are illegal in Belarus. However, authorities conduct surveillance of Internet activities under the pretext of protecting national security. In 2001, the president extended the concept of 'national security' to include the Internet as a potential threat to the information security of the country."

In 2007 and 2008, ONI tested seven main ISPs: Atlant, Aichyna, BASNET, Belinfonet, Belpak (Beltelecom), BN, and Solo. The testing confirmed blocking by almost all ISPs. Many Web sites tested on the academic network BASNET were inaccessible in Belarus, including position websites and local and global freedom of expression websites. International social networking, hosting, e-mail, P2P, and translation and multimedia Web sites were also filtered on BASNET, in addition to Web sites containing information on drug and alcohol consumption, as well as terrorist activities. Google transparency does not report any takedown requests from Belarus. Reporters Without Borders, reports<sup>43</sup> that in January 2011, Estonia stated that it was ready to put its cyber expertise to work on behalf of the Belarusian opposition to teach them "how to manage their internet websites and protect them against cyberattacks."

<sup>41</sup> <http://pravo.by/main.aspx?guid=71393>

<sup>42</sup> <http://opennet.net/research/profiles/belarus>

<sup>43</sup> <http://en.rsf.org/surveillance-belarus,39746.html>



## PHONE BRANDS<sup>44</sup>

<b>Phone</b>	S5830 Galaxy Ace	I9100 Galaxy II	iPhone 4	N7000 Galaxy Note	S5660 Galaxy Gio
<b>Manu</b>	Samsung	Samsung	Apple	Samsung	Samsung
<b>Released</b>	February 2011	April 2011	June 2010	October 2011	March 2011
					
<b>Data</b>	GPRS/EDGE C10	GPRS/EDGE C10	GPRS/EDGE C10	GPRS/EDGE C12	GPRS/EDGE
<b>Bluetooth</b>	V2.1 vA2DP	v3.0+HS	v2.1 with A2DP	v3.0 with A2DP	v2.1 with A2DP
<b>Sensors</b>	Accelerometer, Proximity, Compass	Accelerometer, Gyro, Proximity, Compass	Accelerometer, Gyro, Proximity, Compass	Accelerometer, Gyro, Proximity, Compass, Barometer	Accelerometer, Proximity, Compass
<b>Internet</b>	Yes	Yes	Yes	Yes	Yes
<b>OS</b>	Android 2.3	Android 4x	IOS 5.1	Android 4x	Android 2.3
<b>GPS</b>	Yes (A)	Yes (A)	Yes (A)	Yes (A+Glonass)	Yes (A)
<b>Camera</b>	5MP	8MP	5MP	8MP	3.15MP
<b>WiFi</b>	b,g,n	a,b,g,n	b,g,n	a,b,g,n	b,g,n

There are no official statistics on handset use and it is noted that there is a significant black market for imported handsets.

## CONCLUSION

Although the mobile penetration is over 100%, the market in Belarus has strong competition. There is a lot of activity in the apps markets and the handset options are from a range of recent smartphones.

## FURTHER INFORMATION

Ministry of Communications and Information of the Republic of Belarus - <http://www.mpt.gov.by/en/>  
 National State Statistical Committee of the Republic of Belarus - [belstat.gov.by](http://belstat.gov.by)  
 Velcom – [www.velcom.by](http://www.velcom.by)  
 MTS - [www.mts.by](http://www.mts.by)  
 Life – [www.life.com.by](http://www.life.com.by)  
 Belcel – [www.belcel.by](http://www.belcel.by)

<sup>44</sup> Data and images from [www.gsmarena.com](http://www.gsmarena.com)